

REMARKS

Claims 1-21 and 26-46, 51, and 52 stand rejected in the Office Action dated December 15, 2008 ("Office Action"). Claims 1, 4-6, 8-10, 13, 14, 16, 19, 20, 21, 26-35, 37-46, 51, and 52 are currently amended. Claims 11, 36, 22-25, and 47-50 are canceled. Thus, claims 1-10, 12-21, 26-35, 37-46, 51, and 52 are currently pending in the application. Applicant submits that no new matter is added to the application by the claim amendments or by the newly added claims. Applicant respectfully requests reconsideration of the claims in accordance with the following remarks.

Claim Rejections – 35 U.S.C. § 101

Claim 26 stands rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. Applicant respectfully traverses the rejection. However, in order to move prosecution forward, claim 26 is amended to recite "[a] computer readable medium encoded with a computer program" as recommended by the Office Action at page 2. Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. § 101 be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 1-21, 26-46, and 51-52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication 2002/0126893 to Held ("*Held*") in view of U.S. Publication No. 2003/0007687 to Nesterov ("*Nesterov*"). Applicant respectfully traverses the rejection.

Claim 1, as amended, recites:

- identifying a target region of pixels in the image that represent an object, the object having a shape and a predefined set of features;
- defining one or more spatial profile functions based at least in part on one or more spatial properties of one or more of the predefined set of features;
- calculating a first probability that one or more pixels in the target region represent a first one of the predefined features based at least in part on a color of the one or more pixels;

calculating a second probability that the one or more pixels represent a second one of the predefined features based at least in part on a color of the one or more pixels;

combining the first probability and the second probability to calculate a probability that the one or more pixels represent the first feature or the second feature; and

computing a new color of the one or more pixels in the target region based at least in part on the probability that the one or more pixels represent the first feature or the second feature and the one or more spatial profile functions.

Neither *Held* nor *Nesterov* has been shown to teach at least these limitations. As pointed out by the Office Action, paragraph 102 of *Held* describes “a measure for the probability whether a certain pixel belongs to a red-defect region or not.” See Office Action, p. 5. However, neither *Held* nor *Nesterov* has been shown to calculate a first probability that the pixel represents a first feature and second probability that the pixel represents a second feature. Further, neither *Held* nor *Nesterov* has been shown to combine two probabilities to calculate a probability that the pixel represents a first feature or a second feature. For example, the present application describes example techniques for combining two calculated probabilities to calculate a probability that a pixel represents a first feature or a second feature.

A probability value that is denoted as “pFeature1orFeature2” represents $\text{fuzzyOr}(\text{pFeature1}, \text{pFeature2})$, where $\text{fuzzyOr}(p1, p2) = p1 + p2 - p1 * p2$. Other definitions of the fuzzyOr function can also be used, for example, $\text{fuzzyOr}(p1, p2) = \text{maximum}(p1, p2)$.

Present Application, p. 5, ll. 23-26. Moreover, neither *Held* nor *Nesterov* has been shown to describe computing a new color of pixels based on a probability that the pixels represent a first feature or a second feature and one or more spatial profile functions.

Thus, *Held* and *Nesterov*, taken alone or in combination, have not been shown to disclose the limitations of claim 1, and claim 1 is patentable over *Held* and *Nesterov*. Claims 2-10, 12-21, and 51 depend from claim 1 and include all of its limitations. For at least the same reasons that claim 1 is patentable, claims 2-10, 12-21, and 51 are also patentable. Accordingly, Applicant respectfully request that the rejection of claims 1-10, 12-21, and 51 be withdrawn.

Claim 26, as amended, recites:

identifying a target region of pixels in the image that represent an object,
the object having a shape and a predefined set of features;
defining one or more spatial profile functions based at least in part on one

or more spatial properties of one or more the predefined set of features;
calculating a first probability that one or more pixels in the target region represent a first one of the predefined features based at least in part on a color of the one or more pixels;
calculating a second probability that the one or more pixels represent a second one of the predefined features based at least in part on a color of the one or more pixels;
combining the first probability and the second probability to calculate a probability that the one or more pixels represent the first feature or the second feature; and
computing a new color of the one or more pixels in the target region based at least in part on the probability that the one or more pixels represent the first feature or the second feature and the one or more spatial profile functions.

For at least the same reasons discussed above with regard to claim 1, claim 26 is patentable over *Held* and *Nesterov*. Claims 27-35, 37-46 and 52 depend from claim 26 and include all of its limitations. For at least the same reasons that claim 26 is patentable, claims 27-35, 37-46 and 52 are also patentable. Accordingly, Applicant respectfully request that the rejection of claims 26-35, 37-46 and 52 be withdrawn.

CONCLUSION

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

If the present application is not allowed and/or if one or more of the rejections is maintained, Applicant hereby requests a telephone conference with the Examiner and further requests that the Examiner contact the undersigned agent to schedule the telephone conference.

No additional fees are believed due at this time. However, if this is incorrect, please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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